

Work Order ID 73341

Wednesday, August 31, 2011 11:04:58 AM



Page 1

Item ID: D3407-043

Accept



Setup Start



Revision ID:

Item Name: Tow Ring

Stop



Start Date: 9/1/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 9/15/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

N

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3407

Rev E

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld D3407-3/-5 using welding rod TIG174 as per Dwg D3407 & QSI
004 A/R TIG174 ROD Batch: *1101972*

11-9-26 *(X17)*

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

11-05-27

(X17)

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

5/10/27

(X17)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73341

Wednesday, August 31, 2011 11:04:58 AM



Page 2

Item ID: D3407-043

Accept



Setup Start



Revision ID:

Item Name: Tow Ring

Stop



Start Date: 9/1/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 9/15/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Powdercoat

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

0.00

Powder Coating

Mask Threaded Section☐ START TIME:

TEMPERATURE: 4000F ☐ FINISH TIME:

2:30
3:00
OVEN

17x 8M-11/09/28

140



QC

QC3- Inspect Part Finish

0.00

Memo

0.00

Quality Control

17x 10 x 109/28
count

Photo →

150



Packaging

Identify as per dwg & Stock Location: 163

0.00

Memo

0.00

Packaging

11/9/28 (17x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3407-243 PAR #: N/A Fault Category: SMALL FAB / Finish NCR: Yes No DQA: 1A Date: 11.10.07
 Resolution: re work Disposition: re work QA: N/C Closed OK Date: 11/10/11

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/01/29	#132	numbers / lettering came through the Plc after it was all power control Qty +1 attached. E.C. Process <u>D3407-5</u> in	<u>SEED</u> <u>11/09/29</u>	→ Strip entire Part with Apparo Dart stapper	<u>M-L</u> <u>11/09/29</u>		<u>11/09/29</u>	<u>S.</u> <u>11/01/29</u>
		wasnt cleared correctly		→ Build + Clean D34075 Run to new number clean with Acetn.	<u>M-L</u> <u>11/09/29</u>			
		originally in small fab		→ Re power control as per Q57005				<u>S.</u> <u>11/01/29</u>
				Start: 8:20 Temp 4000F Pin: 8:50	<u>M-L</u> <u>11/04/29</u>			<u>S.</u> <u>11/01/29</u>

NOTE: Date & initial all entries

Work Order ID 73341

Wednesday, August 31, 2011 11:04:58 AM



Page 3

Item ID: D3407-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Tow Ring

Start Date: 9/1/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 9/15/2011 Req'd Qty: 8.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/10/31

ME
11-09-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, August 31, 2011 11:04:56 AM

Page 1

Work Order ID: 73341

Parent Item: D3407-043

Parent Item Name: Tow Ring



Start Date: 9/1/2011


Required Date: 9/15/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 05.10.14 New issue KJ/EC
IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC


Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3407-3  Stem		Manufactured	No			100	Each	9.0000	1	8			
---	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

72174 X 17

Location Loc Qty Loc Code

WA 9
71880 9

D3407-5  Ring		Manufactured	No			100	Each	18.0000	1	8			
---	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

Location Loc Qty Loc Code

WA 18
72146 18

73336 X 17

Q 11-9-26

Q 11-9-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

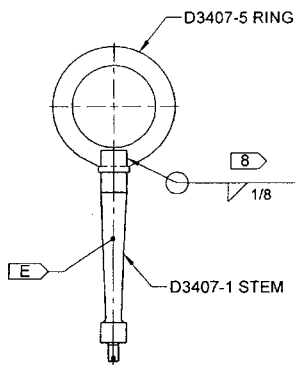
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

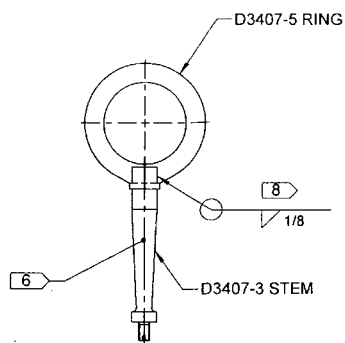
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

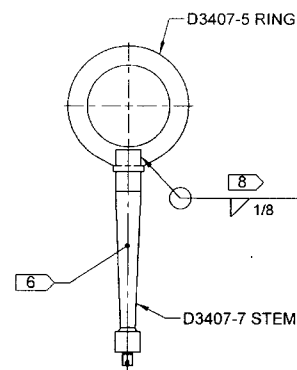
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



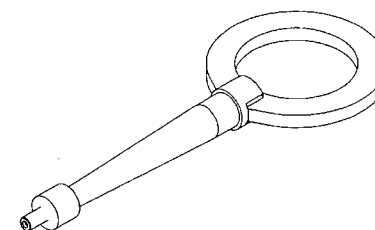
D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING

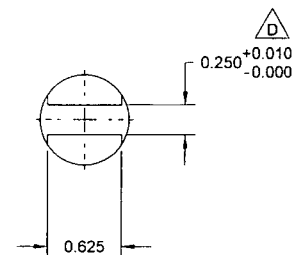
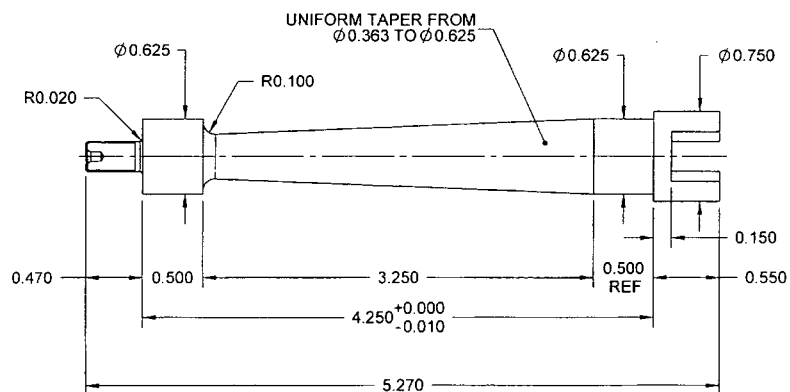
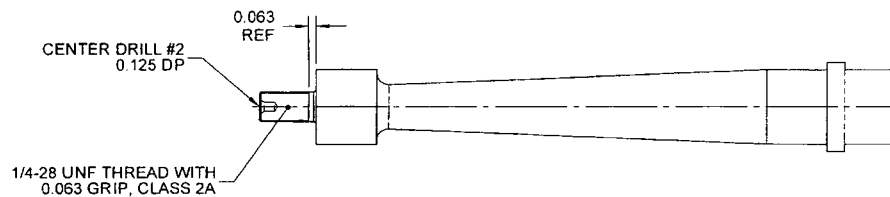


RELEASED

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.23		
DART AEROSPACE USA, INC. PORT HADLOCK, WA DRAWING NO. D3407 TITLE TOW RING REV. E SHEET 1 OF 5 SCALE NTS <small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>			



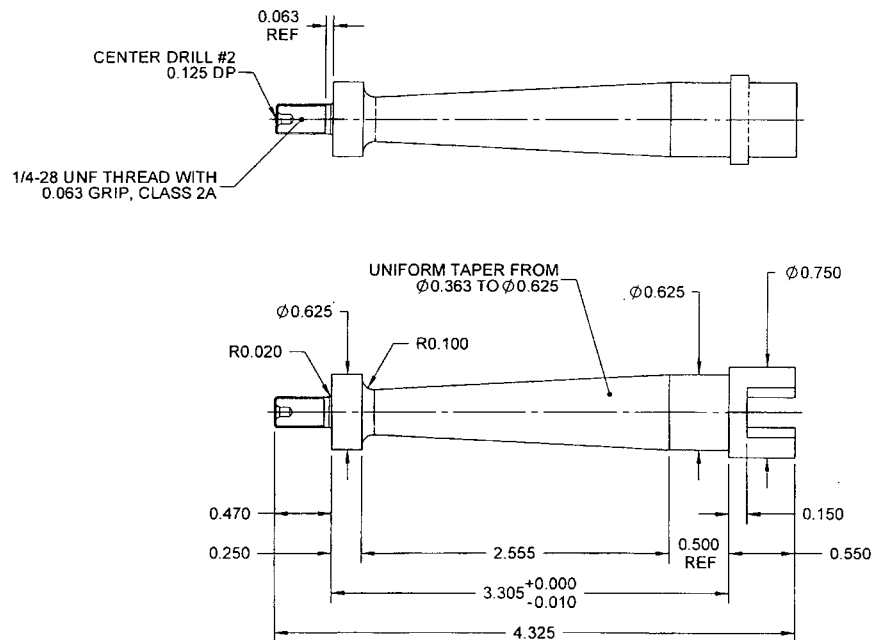
D3407-1 STEM

RELEASED

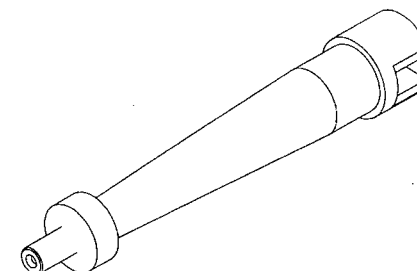
NOTES:

- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.33 lbs

DESIGN	HP	DART AEROSPACE USA, INC.	
DRAWN	HP	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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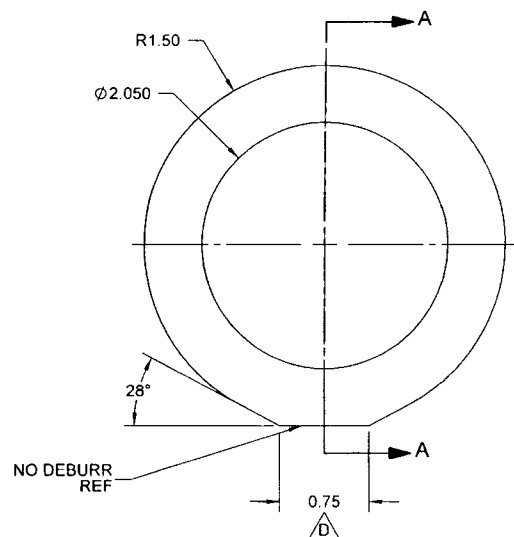
D3407-3 STEM



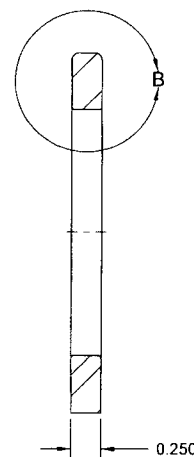
- NOTES:**
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.27 lbs

RELEASED
08-08-01-164

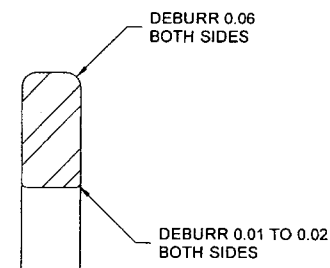
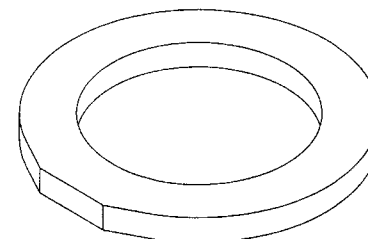
DESIGN	40	DART AEROSPACE USA, INC.	
DRAWN	174	PORT HADLOCK, WA	
CHECKED	5	DRAWING NO.	REV. E
MFG. APPR.	2nd	D3407	SHEET 3 OF 5
APPROVED	174	TITLE	SCALE
DE APPR.	174	TOW RING	NTS
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D3407-5 RING



SECTION A-A



**DETAIL B
SCALE 2X**

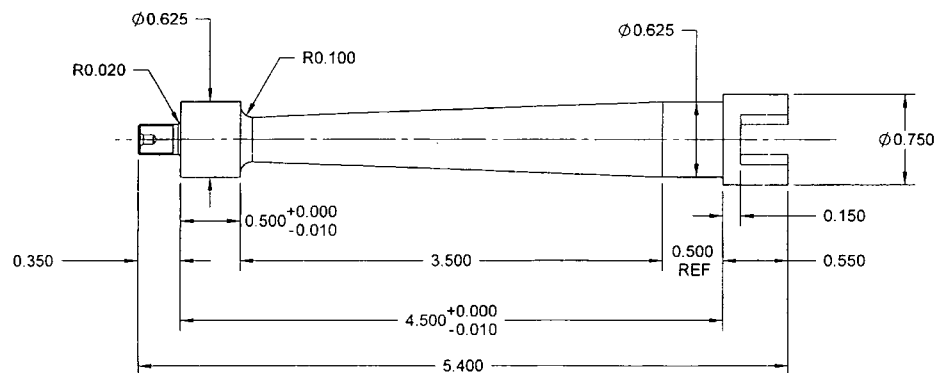
RELEASED
08-08-01-10

- NOTES:**
- 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.27 lbs

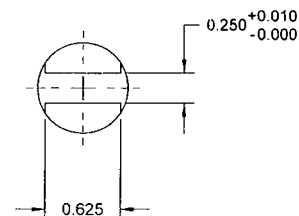
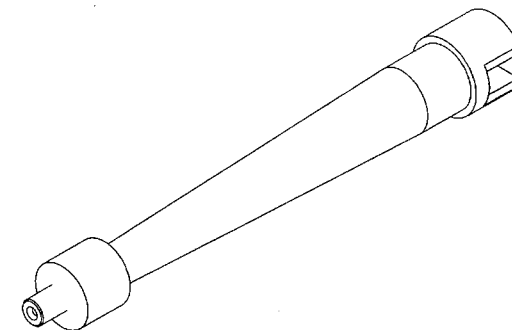
DESIGN	47	DART AEROSPACE USA, INC.	
DRAWN	1/2	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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0.063
REF
CENTER DRILL #2
0.125 DP

1/4-28 UNF THREAD WITH
0.063 GRIP, CLASS 2A



D3407-7 STEM



RELEASED

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.34 lbs

DESIGN	AJS	DART AEROSPACE USA, INC.	
DRAWN	JPT	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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